UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,398	01/28/2004	Kenji Mikami	00862.023426.	2551

5514 7590 05/27/2009

FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER	
KAU, STEVEN Y	

ART UNIT	PAPER NUMBER
2625	

MAIL DATE	DELIVERY MODE
05/27/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/765,398	MIKAMI, KENJI	
	Examiner	Art Unit	
	STEVEN KAU	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 March 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4,5,8,9 and 12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4,5,8,9 and 12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's amendment was received on 3/17/2009, and has been entered and made of record. Currently, claims 1, 4, 5, 8, 9 and 12 are pending for further examination in this Action.

.

Response to Remark/Arguments

2. Applicant's arguments with respect to claims 1, 4, 5, 8, 9 and 12 have been fully considered and the reply to the Remarks/Arguments is in the following:

- Applicant's arguments with respect to claims 1, 4, 5, 8, 9 and 12 have been fully considered but are moot in view of the new ground(s) of rejection due to the amendments.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 5 and 8 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. Supreme Court precedent[1] and recent Federal Circuit decisions[2] indicate that a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claims recite a series of steps or acts to be performed, the claim(s) neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. For example, Claim 5 is directed to an image forming method, steps recite, "a determination step of determining whether or not a toner application rate for an object contained in input data exceeds a predefined toner reduction rate if the type of the object is formed uniformly of a designated color; a processing step of applying reduction processing to the designated color of the object so that the toner application rate falls within the predefined toner reduction rate when it is determined that the toner application rate on the object exceeds the predefined toner reduction rate; and a rasterizing step of rasterizing the object using the color obtained by applying the reduction processing to the designated color." The applicant has not provided explicit and deliberate definitions of which particular apparatus is used for forming an image, i.e. executing steps of "determining whether or not a toner application rate for an object contained in input data exceeds a predefined toner reduction rate if the type of the

---

[1] *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

[2] *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

object is formed uniformly of a designated color", "a processing step of applying reduction processing to the designated color of the object so that the toner application rate falls within the predefined toner reduction rate when it is determined that the toner application rate on the object exceeds the predefined toner reduction rate", and "a rasterizing step of rasterizing the object using the color obtained by applying the reduction processing to the designated color", etc., or to limit the steps of "determining whether or not a toner application rate for an object contained in input data exceeds a predefined toner reduction rate if the type of the object is formed uniformly of a designated color", "a processing step of applying reduction processing to the designated color of the object so that the toner application rate falls within the predefined toner reduction rate when it is determined that the toner application rate on the object exceeds the predefined toner reduction rate", and "a rasterizing step of rasterizing the object using the color obtained by applying the reduction processing to the designated color", etc., for transforming underlying subject matter (such as an article or material) to a different state or thing. Thus, the method of compensating for pixel distortion while reproducing hologram data would be reasonably interpreted as a series of steps completely performed mentally, verbally or without a machine, i.e. a set of algorithm or a set of procedures without a machine for execution. Claim 8 is a dependent claim to claim 5, and is rejected under 35 U.S.C. 101 because of its dependency to claim 5.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 5, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Mo (US 6,084,689).

Regarding claim 1.

Mo discloses An image forming apparatus comprising: a determination unit (**i.e. CPU of Fig. 1**) for determining whether or not a toner application rate for an object contained in input data exceeds a predefined toner reduction rate if the type of the object is formed uniformly of a designated color (**i.e. Mo discloses a TAC, Total Area Coverage, the upper limit of the total of toner application rate, or reduction rate, col 1, lines 42-52, and a process of Figs. 3, 4A & 4B to determine whether a toner rate of an input object exceeds TAC, i.e. the predefined reduction rate, col 8, lines 8, lines 4-63 and col 9, lines 25-67**); a processing unit (**i.e. Saturation Compensator 308 of Fig. 3**) for applying reduction processing to the designated color of the object so that the toner application rate falls within the predefined toner reduction rate when it is determined that the toner application rate on the object exceeds the predefined toner reduction rate (**i.e. Saturation Compensator 308 reduces the color not to exceed the TAC threshold value and the process is disclosed in Figs. 4 & 5, col 9, line 25 to col 12, line 3**); and a rasterizing unit for rasterizing the object using the color

obtained by applying the reduction processing to the designated color (**referring to Fig. 1, pixel data stored in memory 114 is converted to a raster signal suitable for use by CRT 117**).

Regarding claim 5.

Claim 5 is directed to a method claim which substantially corresponds to operation of the device in claim 1, with method steps directly corresponding to the function of device elements in claim 1. Thus, claim 5 is rejected as set forth above for claim 1.

Regarding claim 9.

Claim 9 is directed to a computer program stored on a computer-readable medium for instructing a computer to execute an image forming method claim which substantially corresponds to operation of the device in claim 1, with processing steps directly corresponding to the function of device elements in claim 1. Thus, claim 9 is rejected as set forth above for claim 1.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 4, 8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mo (US 6,084,689) as applied to claims 1, 5 and 9 above and in view of Moriyama (US 6,084,604) .

Regarding claim 4, in accordance with claim 1.

Mo does not disclose wherein said determination unit determines discriminates the type of object based upon an instruction contained in image data described in page description language.

Moriyama teaches wherein said determination unit determines discriminates the type of object based upon an instruction contained in image data described in page description language (**i.e. referring to Figs. 4, 5 & 15, etc., which disclose a process of determining whether the object contains black data or not, col 7, lines 3-9 and col 12, line 63 to col 13, line 27**).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Mo' 689 reference to include wherein said determination unit determines discriminates the type of object based upon an instruction contained in image data described in page description language as taught by Moriyama'

604 reference. The motivation for doing so would have been to enhance colorant or toner control for cost reduction, and further it is easily implemented by one or other in the art with a predictable result.

Regarding claim 8, in accordance with claim 5.

Claim 8 is directed to a method claim which substantially corresponds to operation of the device in claim 4, with method steps directly corresponding to the function of device elements in claim 4. Thus, claim 8 is rejected as set forth above for claim 4.

Regarding claim 12, in accordance with claim 9.

Claim 9 is directed to a computer program stored on a computer-readable medium for instructing a computer to execute an image forming method claim which substantially corresponds to operation of the device in claim 4, with processing steps directly corresponding to the function of device elements in claim 4. Thus, claim 12 is rejected as set forth above for claim 4.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Kau whose telephone number is 571-270-1120 and fax number is 571-270-2120. The examiner can normally be reached on Monday to Friday, from 8:30 am -5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Steven Kau/
Examiner, Art Unit 2625
5/25/2009

/David K Moore/
Supervisory Patent Examiner, Art Unit 2625